

REMARKS/ARGUMENTS

Claims 1-17 were previously pending in the application. Claims 1-17 are canceled, and new claims 18-26 are added herein. Assuming the entry of this amendment, claims 18-26 are now pending in the application. The Applicant hereby requests further examination and reconsideration of the application in view of the foregoing amendments and these remarks.

On page 2 of the office action, the Examiner objected to the disclosure because of an informality. In response, the Applicant has amended paragraph [0017] as suggested by the Examiner.

On page 2, the Examiner also objected to the drawings. Regarding Fig. 2, the Examiner suggested that VCO should be marked as 105. In addition, the Examiner suggested that Fig. 2 should be designated as –Prior Art–. The Applicant assumes that the Examiner intended to refer to Fig. 1, not Fig. 2, as illustrating prior art. In response, the Applicant submits herewith a Transmittal of Corrected Drawing(s) amending Figs. 1 and 2 based on the Examiner's suggestions.

On page 3, the Examiner rejected claims 1-2, 9, 11-12, and 16 under 35 U.S.C. 102(b) as being anticipated by Andoh. On page 5, the Examiner rejected claims 3-8, 10, 13-15, and 17 under 35 U.S.C. 103(a) as being unpatentable over Andoh in view of Andrews. For the following reasons, the Applicant submits that all of the now-pending claims are allowable over the cited references.

New Claims 18-26

Support for new claims 18-26 is found as follows:

<u>New Claim</u>	<u>Support</u>
18	Fig. 2
19	Fig. 2
20	Fig. 2
21	Fig. 2
22	Paragraphs [0017]-[0022]
23	Paragraphs [0017]-[0019]
24	Paragraphs [0021]-[0022]
25	Paragraph [0024]
26	Fig. 2 and Paragraphs [0017]-[0022]

New claim 18 is directed to a phase-locked loop (PLL) circuit comprising a frequency synthesis section, a direct frequency control section, and a controller.

The frequency synthesis section comprises a voltage-controlled oscillator (VCO), a loop filter, a phase frequency detector (PFD), a charge pump, and a first switch. The VCO generates a PLL output signal for the PLL circuit based on a control voltage signal applied at an input of the VCO. The loop filter is connected to the VCO input. The PFD compares a feedback signal derived from the PLL output signal to a reference signal. The charge pump generates charge based on output signals from the PFD. The first switch selectively connects the charge pump to the loop filter.

The direct frequency control section comprises a look-up table (LUT), a first tuning section, a second switch, a second tuning section, and a third switch. The LUT stores digital data values representing a plurality of tuning voltages corresponding to different frequencies for the PLL output signal. The first tuning section converts a digital data value received from the LUT into a corresponding

tuning voltage for the VCO. The second switch selectively connects the first tuning section to the VCO input to selectively apply the corresponding tuning voltage from the first tuning section as the control voltage signal for the VCO. The second tuning section generates a digital data value for the LUT corresponding to the control voltage signal applied to the VCO input. The third switch selectively connects the VCO input to the second tuning section to selectively enable the second tuning section to update the LUT based on the generated digital data value.

The controller controls the first, second, and third switches.

The cited references whether considered alone or in combination fail to teach or even suggest such a combination of features. As such, the Applicant submits that new claim 18 is allowable over the cited references. Since the rest of the claims depend variously from claim 18, it is further submitted that those claims are also allowable over the cited references. The Applicant submits therefore that the rejections of claims under Section 102(b) and 103(a) have been overcome.

In view of the above amendments and remarks, the Applicant believes that the now-pending claims are in condition for allowance. Therefore, the Applicant believes that the entire application is now in condition for allowance, and early and favorable action is respectfully solicited.

Respectfully submitted,



Steve Mendelsohn
Registration No. 35,951
Attorney for Applicant
(215) 557-6657 (phone)
(215) 557-8477 (fax)

Date: 12/27/05
Customer No. 46900
Mendelsohn & Associates, P.C.
1500 John F. Kennedy Blvd., Suite 405
Philadelphia, Pennsylvania 19102